

CLEAN VERSION OF AMENDED CLAIMS

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1. A method for comparing and matching a first set of digital data to at least a second set of digital data, comprising:  
using a graphics rasterizer for raster transforming at least one of the first set of digital data and the second set of digital data;  
statistically comparing and matching the raster transformed sets of digital data to appropriately corresponding portions of each other.

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6. A method for comparing and matching a first set of digital data to at least a second set of digital data, comprising:  
loading at least one of the first and second sets of digital data into a first memory device;  
using a 3D graphics rendering device for rendering model transformations and accumulating statistics of the loaded digital data;  
adjusting the model transformations based on the accumulated statistics; and  
statistically comparing and matching the model transformations of the loaded set of digital data to appropriately corresponding portions of the other set of digital data.

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8. The method of claim 6, wherein adjusting the model transformations comprises analyzing the statistical comparisons and generating new transformations for matching the sets of data.

9. A system for tracking digital templates of a digital scene defined by plural images, comprising:  
a raster processor that transforms at least one of the templates;  
a 3D graphics rendering processor that accumulates information for each digital template; and  
a compare processor that simultaneously and statistically compares and matches images associated with the templates for tracking the templates based on the accumulated information.

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11. The system for tracking digital templates of claim 10, wherein the addresses reflect transformations, including combinations of rotations, scales and perspective transforms of the template or image.

12. The system for tracking digital templates of claim 10, wherein the addresses serve as input to filtering functions that read from the images to be compared and generate color values.

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14. The system for tracking digital templates of claim 13, wherein if the pixel is permitted to contribute, the color values are sent to a statistics/comparison device for statistical analyses and comparison processing.

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18. The system for tracking digital templates of claim 9, wherein the compare processor comprises an alpha blending device that allows use of a color component for weighting statistical information used by the compare processor for simultaneously and statistically comparing and matching images associated with the templates for tracking the templates.